

Remarks

All claims 1 through 24 previously in prosecution stand finally rejected under 35 USC 103(a) as obvious over Gorelik (U.S. 2002/0004799) in view of Fortier (U.S. 5,497,487) and Bretl(U.S. 6,360,219). These claims are canceled and replaced with new claims 25 through 40.

A cursory reading of Gorelik reveals that the subject matter disclosed is not for use in a multi-processing system, or if it is, then traditional methods of serializing operations are assumed. Gorelik teaches the update of one database while a second database is used for searching. At some point, "When the loading is completed, the applications switch to use the newly loaded database." (Parag. 0008, lines 6-7). Despite the assertion that "Methods are provided for switching between the two databases and keeping them consistent." (Parag. 0010, lines 3-5), there is absolutely no teaching whatsoever of how to maintain a consistent system short of stopping everything and then throwing the switch. Examiner is invited to review paragraphs 0031 through 0034, which contain the most detail regarding state changes, and note that there is no teaching here of how to accomplish such database updating and switching in a multi-processing environment.

Fortier teaches a method of database rollback when a failure occurs in the midst of a series of interrelated updates. This method is a variation or improvement of the known methods using logging methods. It does not involve the use of two databases which are switched in a multi-processing environment after an update of one copy, followed by the subsequent update of the other copy to synchronize the databases.

Bretl discloses a queue add and remove procedure that never becomes empty in the sense that the head and tail pointers never both contain "Null". This solves a problem

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when both an add process and a remove process must access the same head and tail pointers when the queue is empty. However, it should be noted that this process does not solve all, or even most, of the conflict problems of maintaining a consistent database in a multi-processing environment.

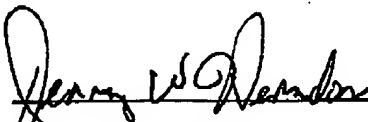
The present invention as now claimed sets forth the use of two separate databases, one for searching and one for updating. Unlike Gorelik, the application teaches a serializing process whereby multiple searches can be performed on the search database at the same time that the update database is modified, and the databases are immediately switched while the active searches continue in the new update database. Further, new searches are initiated against the new search database. The synchronization of the new update database is activated when all pre-existing searches are completed in the update database. The disclosed and claimed material means that a searcher will never be blocked due to a conventional lock. None of the references even remotely suggest or teach such a technique.

Applicant believes that patentable novelty is demonstrated by the above discussion and the new claims. Examiner is requested to examine this RCE and pass it to issue.

Respectfully submitted,

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